

LB/DON/27/04

BUSINESS PERFORMANCE IMPROVEMENT THROUGH QUALITY MANAGEMENT A CASE STUDY

By

E B D C DILRUKSHI

UNIVERSITY OF MORATUWA
SRI LANKA

This dissertation was submitted to the Department of Management of Technology of the University of Moratuwa in partial fulfillment of the requirements for the Degree of MBA in Technology Management



Supervised by

Dr. N D Gunawardena
Senior Lecturer, Department of Civil Engineering
University of Moratuwa.

University of Moratuwa



79654

DEPARTMENT OF MANAGEMENT OF TECHNOLOGY *um Thesis coll.*
UNIVERSITY OF MORATUWA
SRI LANKA

79654

79654

DECLARATION

“ I certify that this thesis does no incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person except where due reference is made in the text.”



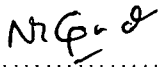
Candidate

Ms. E.B.D.C. Dilrukshi



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations

To the best of my knowledge, the above particulars are correct.



Supervisor

Dr. N. D. Gunawardena

Name

.....

.....

.....

ACKNOWLEDGEMENT

I take this opportunity to express my sincere thanks to those who assisted and guided me in this study. This dissertation would not have been possible without their supports and encouragements.

Firstly, I wish to thank Dr. N.D. Gunawardena for being my supervisor and the guidance given to the success of this project.

I would also be grateful to Mr.Ranjith Jinasena, Director - Finance Jinasena Group, Mr.Tissa Jinasena, Managing Director Loadsatar (Pvt) Limited, Mr. P.H. Piyathilaka, Quality Assurance Manager, Loadstar (Pvt) Ltd, Mr. Sarath Kumara, Manager-Human Resources Development, Loadstar (Pvt) Ltd for giving their fullest corporation to conduct this study.

My sincere thanks also goes to my colleges and the faculty members of Management of Technology for their supports and encouragements over the last two years.

Finally, I wish to pay my tribute to my loving husband Vinith for his sacrifice during this period, strength and courage given to complete this task.

CONTENTS

Declaration	
Acknowledgement	
Abstract	
Abbreviations	

CHAPTER 1: INTRODUCTION

1.1	Introduction to the Study	1
1.2	Background	3
1.3	Objective Of The Study	4
1.4	Methodology	4
1.5	Limitations of the Study	5

CHAPTER 2: LITERATURE REVIEW

2.1	Quality	7
2.2	The ISO 9000 Series of Standards	8
2.3	ISO 9000: 2000 International Standards	9
2.4	ISO 9000 and its Benefits	10
2.5	Total Quality Management	12

CHAPTER 3: APPLICATION OF ISO 9000 IN A MANUFACTURING ORGANIZATION: THE CASE STUDY OF LOADSTAR

3.1	Introduction of ISO 9000 System to LS	15
3.2	Status Prior to the Implementation of ISO 9000	15
3.3	Benefits Achieved By Loadstar through ISO 9002	16

CHAPTER 4: MEASUREMENT OF THE QUALITY STATUS AT LOADSTAR

4.1	MBNQA Model	20
-----	-------------	----

CHAPTER 5: ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

5.1 ISO 9000 at Loadstar 25

5.2 Status of Quality at Loadstar 29

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS 35

References 37

Appendix 1 - List of customer complains received during 2001/2002

Appendix 2 - Questionnaire distributed among Managers for the measurement
of Quality status at Loadstar



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

ABSTRACT

In today's business environment, Management of quality has become the major concern of all the Organizations and quality has given a much broader meaning than before to meet the increased global completion. Focus on quality is now required to address the overall organization from the top to the bottom irrespective of the nature of the business. In today's global market, customers require that their expectations and needs are continually met. To ensure the customer's needs, ISO 9000 quality standards were developed in 1987 by International Organization for Standardization (ISO).

Loadstar (Pvt) Limited is a BOI approved, 100% export oriented company in Sri Lanka, manufacturing Industrial Tyres and related accessories. It is a joint venture with Solideal, Belgium, a global company in industrial tyres, and Loadstar (Pvt) Ltd, which is a subsidiary of Jinasena Limited.

In 1997 Loadstar was awarded with ISO 9002 certificate. Currently it is practicing ISO 9000:2000.



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

This research aims to study two scenarios. One is to see the improvements in business performance at LS through the implementation of ISO 9000. Second, is to evaluate the company in the context of total quality management taking Malcolm Baldrige model as a framework. The study was carried out by the analysis of records maintained at loadstar factories, Literature surveys, interviews and questionnaire.

The implementation of ISO 9000 at LS factories has lead to several positive outcomes in their business performances. The improvements in human resources development, internal operations management, management's perceptions of performance with regard to customer satisfaction and product quality are the main improvements achieved by Loadstar. Having implemented ISO 9000, still there are some areas in the supply chain such as product packaging and delivery, which need to be improved. Through proper training programs, increasing interdepartmental coordination, introducing a team reward system to delivery and packing departments, those weak areas could be strengthened.

Based on Malcolm Baldrige model the company scored 740 marks out of 1000. Based on the model it can be suggested that the company has an effective systematic approach responsive to multiple requirements of the item and current changing business needs is evident. The company has no significant gaps compared to TQM.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

ABBREVIATIONS

LS	- Loadstar (Pvt) Ltd.
MBNQA	- Malcolm Baldrige National Quality Award
NIST	- National Institute of Standards and Technology
TQM	- Total Quality Management
SLSI	- Sri Lanka Standard Institute
ISO	- International Organization for Standardization
QMS	- Quality Management System



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk